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EXAMINER	
NASH, LASHANYA RENEE	
ART UNIT	**PAPER NUMBER**
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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/909,645	Applicant(s) LAU ET AL.	
	Examiner LaShanya R. Nash	Art Unit 2153	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *12 December 2004*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-21* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-21* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *3/21/2005*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

This action is in response to an Amendment filed December 03, 2004. Claims 1-21 are presented for further consideration.

Response to Arguments

Claim rejections, see Remarks/Arguments, with respect to claims 11-12 under 35 USC 112, second paragraph are withdrawn.

Applicant's arguments, see Remarks/Arguments, with respect to claims 1-2,7-10, 13-16, and 18-21under 35 USC 102(e). Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground of rejection is made under 35 USC 120(e), in view of newly applied prior art.

Applicant's arguments, see Remarks/Arguments, with respect to claims 3-4, 11,12 and 17 were rejected under 35 USC 103(a), have been fully considered but are moot in view of the new ground of rejection.

The indicated allowability of claims 5 and 6 are withdrawn in view of the newly discovered reference to Hunter et al. (US Patent 6,223,172). Rejections based on the newly cited reference follow.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-2, 7-10, 13-16, and 18-21are rejected under 35 U.S.C. 102(e) as being anticipated by Mimura et al. (US Patent 6,847,613), hereinafter referred to as Mimura.

In reference to claim 1, Mimura discloses a method for identification of a communication flow carried across an IP network, for subsequent observation and acquisition of statistical data in order to provide Service Level Agreement (SLA) monitoring (abstract; column 14, lines 38-56). The flow identifier method is disclosed as:

- A method (column 4, lines 8-50; column 5, lines 60-64) for identifying a flow of data between a source (i.e. sender; Figure 3-item 31) and a destination (i.e. receiver; Figure 3-item 32) in a network (Figure 3-item 30; column 8, lines 5-40), said method comprising the steps of:

- Identifying a plurality of packets at a first point (Figure 3-item 33) and a second point (Figure 3-item 34) in the network, (column 5, lines 65 to column 6, line 1; column 8, lines 31-65);
- Comparing a source address (i.e. Source IP Address [SIP]; column 6, lines 1-7) of each packet identified at the second point (i.e. header of incoming packet; column 5, lines 60 to column 6, line 1) with one or more source addresses of packets identified at the first point (i.e. stored in meter and flow table; column 6, lines 36 to column 7, line 33; column; and stored in meter; column 11, lines 41-56); and if one of the compared source addresses matches (i.e. conditions for communication flow identification are combinations of information in the IP address header; column 6, lines 3-7), identifying a destination address (i.e. Destination IP Address [DIP]; column 6, lines 1-7) of the corresponding packet identified at the second point (column 6, lines 22-35), and associating the identified destination address and the matching source address to a flow between the source and destination (i.e. flow identifier; Figure 7-item 75).

In reference to claim 2, Mimura discloses the aforementioned flow identification method as:

- A method (column 4, lines 8-50; column 5, lines 60-64) for identifying a flow of data between a source (i.e. sender; Figure 3-item 31) and a destination (i.e. receiver;

Figure 3-item 32) in a network (Figure 3-item 30; column 8, lines 5-40), said method comprising the steps of:

- Identifying a plurality of packets at a first point (Figure 3-item 33) and a second point (Figure 3-item 34) in the network, (column 5, lines 65 to column 6, line 1; column 8, lines 31-65);
- Comparing a destination address (i.e. Destination IP Address [DIP]; column 6, lines 1-7) of each packet identified at the first point (i.e. stored in meter and flow table; column 6, lines 36 to column 7, line 33; column; and stored in meter; column 11, lines 41-56) with one or more destination addresses of packets identified at the second point (i.e. header of incoming packet; column 5, lines 60 to column 6, line 1); and if one of the compared destination addresses matches (i.e. conditions for communication flow identification are combinations of information in the IP address header; column 6, lines 3-7), identifying a source address (i.e. Source IP Address [SIP]; column 6, lines 1-7) of the corresponding packet identified at the first point (column 6, lines 22-35), and associating the identified source address and the matching destination address to a flow between the source and destination (i.e. flow identifier; Figure 7-item 75).

In reference to claim 13, Mimura explicitly discloses a network management system for executing the aforementioned flow identifier method, (Figure 3; abstract; column 8, lines 5-16). Mimura further discloses:

- A system (Figure 3) for identifying a flow of data between a source (i.e. sender; Figure 3-item 31) and a destination (i.e. receiver; Figure 3-item 32) in a network (column 5, lines 65 to column 6, line 1; column 8, lines 31-65) comprising:
    - A first processor (i.e. flow identification unit of packet switch; Figure 3-item 34; column 5, lines 45-64) that identifies a destination address (i.e. Destination IP Address [DIP]; column 6, lines 1-7) of one or more packets flowing through a second point in the network and sends the destination addresses to a first point (i.e. via meter reader; Figure 3-item 39; column 9, lines 9-44) in the network (Figure 3-item 30);
    - A second processor (flow identification unit of packet switch; Figure 3-item 33) that identifies a destination address (i.e. Destination IP Address [DIP]; column 6, lines 1-7) of a packet flowing through the first point, receives the destination addresses from the first processor (i.e. via meter reader; Figure 3-item 39; column 9, lines 9-65), generates flow information (i.e. statistics data; column 6, line 59 to column 7, line 48) based on a comparison between the destination addresses received from the first processor and the destination addresses of the packet identified at the second processor, (i.e. identified flow; column 9, lines 44-65), wherein the flow information identifies the flow of

packets between the first point and the second point, (i.e. flow identifier; column 11, lines 41-56; Figure 7-item 75).

In reference to claim 14, Miramura discloses the aforementioned system as:

- A system (Figure 3) for identifying a flow of data between a source (i.e. sender; Figure 3-item 31) and a destination (i.e. receiver; Figure 3-item 32) in a network (column 5, lines 65 to column 6, line 1; column 8, lines 31-65) comprising:
    - A first processor (flow identification unit of packet switch; Figure 3-item 33; column 5, lines 45-64) that identifies a source address (i.e. Source IP Address [SIP]; column 6, lines 1-7) of one or more packets flowing through a first point in the network, and sends the source addresses to a second point (column 8, line 31 to column 9, line 9) in the network (Figure 3-item 30); and
    - A second processor (i.e. flow identification unit of packet switch; Figure 3-item 34; column 5, lines 45-64) that identifies a source address of a packet flowing through the second point, receives source addresses from the first processor (i.e. Source IP Address [SIP]; column 6, lines 1-7), and generates flow information (i.e. statistics data; column 6, line 59 to column 7, line 48) based on a comparison between the source addresses received from the first processor and the source address of the

packet identified at the second processor (i.e. identified flow; column 9, lines 9-44), wherein the flow information identifies the flow of packets between the first point and the second point, (i.e. flow identifier; column 11, lines 41-56; Figure 7-item 75).

In reference to claim 15, Mimura explicitly discloses a method, specifically a flow identifier method, comprising:

- Receiving a first set of information (i.e. new packet; column 13, lines 35-40);
- Receiving a second set of information (i.e. flow table/conditions for flow; column 13, lines 40-43);
- Generating a match value (i.e. matching condition/ flow identifier) from the first set of information and the second set of information, (column 13, lines 43-51); and generating a flow entry based upon the match value, (i.e. information stored in flow table; column 11, lines 41-56).

In reference to claim 18, Mimura explicitly discloses a method, specifically a flow identifier method, comprising:

- Comparing a first destination address (i.e. header new packet; column 13, lines 35-40; column 5, line 65 to column 6, line 7) with a second destination address (i.e. flow table/conditions for flow; column 13, lines 40-43) to generate a match value (i.e. matching condition/ flow identifier; column 13, lines 43-51); and

- Generating a flow entry based upon the match value, (i.e. information stored in flow table; column 11, lines 41-56).

In reference to claim 20, Mimura discloses a method, specifically a packet identifier method, comprising:

- Comparing a first source address (i.e. header new packet; column 13, lines 35-40; column 5, line 65 to column 6, line 7) with a second source address (i.e: flow table/conditions for flow; column 13, lines 40-43) to generate a match value (i.e. matching condition/ flow identifier; column 13, lines 43-51); and
- Generating a flow entry based upon the match value, (i.e. information stored in flow table; column 11, lines 41-56).

In reference to claim 7, Mimura shows the packet identifier method to further comprise generating flow information at the first point based on the matched destination address and the identified source address, (i.e. determined communication flow; column 7, lines 30-48)

In reference to claim 8, Mimura shows the packet identifier method sending the flow information generated at the first point to the second point (column 8, lines 31-55).

In reference claim 9, Mimura shows the packet identifier method updating the flow information at the first point when a new destination address is identified at the second point, (column 14, lines 5-56).

In reference to claim 10, Copeland shows the packet identifier method updating the flow information at the first and second point when a destination address is purged (i.e. terminated) at the second point after a predetermined time-out-period, (column 13, lines 58 to column 14, line 10).

In reference to claim 16, Copeland shows the packet identifier method wherein: the first set of information (i.e. new packet) comprises a first source address and a first destination address, (column 13, lines 35-40; column 5, line 65 to column 6, line 7); and the second set of information comprises a second source address and a second destination address, (i.e. flow table/conditions for flow; column 13, lines 40-43); the match value is based upon the first destination address and the second destination address, (column 13, lines 43-51); and the flow entry indicates the information is flowing between a first node associated with the first set of information and a second node associated with the second set of information, (column 11, lines 41 to column 12, line 3; Figure 7-items74&75).

In reference to claim 19, Mimura shows the packet identifier method wherein the flow entry indicates that information is flowing between a first node

associated with the first destination address and a second node associated with the second destination address, (column 11, line 41 to column 12, line 3; Figure 7-items 74&75).

In reference to claim 21, Mimura shows the packet identifier method wherein the flow entry indicates that information is flowing between a first node associated with the first source address and a second node associated with the second source address, (column 11, line 41 to column 12, line 3; Figure 7-items 74&75).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 3-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mimura et al. (US Patent 6,847,613) in view of Hunter et al. (US Patent 6,223,172), hereinafter referred to as Mimura and Hunter respectively.

In reference to claim 5, Mimura discloses the aforementioned flow identification method as:

- A method (column 4, lines 8-50; column 5, lines 60-64) for identifying a flow of data between a source (i.e. sender; Figure 3-item 31) and a destination (i.e. receiver;

Figure 3-item 32) in a network (Figure 3-item 30; column 8, lines 5-40), said method comprising the steps of:

- Identifying a plurality of packets at a first point (Figure 3-item 33) and a second point (Figure 3-item 34) in the network, (column 5, lines 65 to column 6, line 1; column 8, lines 31-65);
- Comparing a destination address (i.e. Destination IP Address [DIP]; column 6, lines 1-7) of each packet identified at the first point (i.e. stored in meter and flow table; column 6, lines 36 to column 7, line 33; column; and stored in meter; column 11, lines 41-56) with one or more destination addresses of packets identified at the second point (i.e. header of incoming packet; column 5, lines 60 to column 6, line 1); and if one of the compared destination addresses matches (i.e. conditions for communication flow identification are combinations of information in the IP address header; column 6, lines 3-7), identifying a source address (i.e. Source IP Address [SIP]; column 6, lines 1-7) of the corresponding packet identified at the first point (column 6, lines 22-35), and associating the identified source address and the matching destination address to a flow between the source and destination (i.e. flow identifier; Figure 7-item 75).

Although Mimura shows substantial features of the claimed invention fails to disclose generating a compressed address group based on the destination address of each packet identified at the second point, wherein generating the compressed address

group comprises identifying network addresses for the packets identified at the second point and if the identified network addresses of two of the packets identified at the second point differ by a least significant bit, then generating a compressed address by combining the identified addresses of the two packets. However, compressing IP addresses were well known in the art at the time of the invention, as further evidenced by Hunter. As a result, this modification to the method disclosed by Mimura would have been obvious to one of ordinary skill in the art at the time of the invention.

In an analogous art, Hunter discloses a method for address routing using address-sensitive mask dissemination, comprising generating a compressed address group based on the destination addresses of identified packets, (i.e. supporting Classless Inter-Domain Routing; abstract; column 1, line 28 to column 2, line 36; column 5, line 45-67). Hunter discloses the address routing method further comprises; if the identified network addresses of two of the packets identified by at least a significant bit, then generating a compressed address by combining the identified addresses of the two packets, (column 10, line 20 to column 11, line 40). One of ordinary skill in the art would have been so motivated to implement the modification to the aforementioned method, so as to locate quickly locate the most appropriate entry (i.e. longest match search) of a given address specified in a packet thereby increasing process efficiency (Hunter column 6, lines 52- 60; column 1, lines 20-26).

In reference to claim 6, Mimura discloses the aforementioned flow identification method as:

- A method (column 4, lines 8-50; column 5, lines 60-64) for identifying a flow of data between a source (i.e. sender; Figure 3-item 31) and a destination (i.e. receiver; Figure 3-item 32) in a network (Figure 3-item 30; column 8, lines 5-40), said method comprising the steps of:
    - Identifying a plurality of packets at a first point (Figure 3-item 33) and a second point (Figure 3-item 34) in the network, (column 5, lines 65 to column 6, line 1; column 8, lines 31-65);
    - Comparing a destination address (i.e. Destination IP Address [DIP]; column 6, lines 1-7) of each packet identified at the first point (i.e. stored in meter and flow table; column 6, lines 36 to column 7, line 33; column; and stored in meter; column 11, lines 41-56) with one or more destination addresses of packets identified at the second point (i.e. header of incoming packet; column 5, lines 60 to column 6, line 1); and if one of the compared destination addresses matches (i.e. conditions for communication flow identification are combinations of information in the IP address header; column 6, lines 3-7), identifying a source address (i.e. Source IP Address [SIP]; column 6, lines 1-7) of the corresponding packet identified at the first point (column 6, lines 22-35), and associating the identified source address and the matching destination address to a flow between the source and destination (i.e. flow identifier; Figure 7-item 75).

Although Mimura shows substantial features of the claimed invention fails to disclose generating a compressed address group based on the destination address of each packet identified at the second point, wherein generating the compressed address group comprises identifying network addresses based on the destination address identified at the second point; classifying each identified network address based on a range of bits in the identified network addresses; and if the identified network addresses of two of the packets identified at the second point differ by a least significant bit, then generating a compressed address by combining the identified addresses of the two packets, wherein the length of the compressed address is one bit less than the combined network addresses. However, compressing IP addresses were well known in the art at the time of the invention, as further evidenced by Hunter. As a result, this modification to the method disclosed by Mimura would have been obvious to one of ordinary skill in the art at the time of the invention.

In an analogous art, Hunter discloses a method for address routing using address-sensitive mask dissemination, comprising generating a compressed address group based on the destination address of each packet identified at the second point, wherein generating the compressed address group comprises identifying network addresses based on the destination address identified at the second point; classifying each identified network address based on a range of bits in the identified network addresses, (i.e. supporting Classless Inter-Domain Routing; abstract; column 1, line 28 to column 2, line 36; column 5, line 45-67). Hunter discloses the address routing method further comprises; if the identified network addresses of two of the packets identified by

at least a significant bit, then generating a compressed address by combining the identified addresses of the two packets, wherein the length of the compressed address is one bit less than the combined network addresses, (column 10, line 20 to column 11, line 40). One of ordinary skill in the art would have been so motivated to implement the modification to the aforementioned method, so as to locate quickly locate the most appropriate entry (i.e. longest match search) of a given address specified in a packet thereby increasing process efficiency (Hunter column 6, lines 52- 60; column 1, lines 20-26).

In reference to claim 3, Mimura discloses substantial features of the claimed invention, specifically identifying a plurality of packets at the second point (column 5, lines 65 to column 6, line 1; column 8, lines 31-65). However, the reference fails to show generating a compressed address group based on the destination address of each packet identified at the second point. Nonetheless, compressing IP addresses were well known in the art at the time of the invention, as further evidenced by Hunter. As a result, this modification to the method disclosed by Mimura would have been obvious to one of ordinary skill in the art at the time of the invention.

In an analogous art, Hunter discloses a method for address routing using address-sensitive mask dissemination, comprising generating a compressed address group based on the destination addresses of identified packets, (i.e. supporting Classless Inter-Domain Routing; abstract; column 1, line 28 to column 2, line 36; column 5, line 45-67; column 10, line 20 to column 11, line 40). One of ordinary skill in

the art would have been so motivated to implement the modification to the aforementioned method, so as to locate quickly locate the most appropriate entry (i.e. longest match search) of a given address specified in a packet thereby increasing process efficiency (Hunter column 6, lines 52- 60; column 1, lines 20-26).

In reference to claim 4, Mimura discloses substantial features of the claimed invention. However, the reference fails to show generating a compressed address group by identifying network addresses based in the destination addresses identified at the second point; and classifying each identified network address based on a range of bits in the identified network addresses. However, compressing IP addresses were well known in the art at the time of the invention, as further evidenced by Hunter. As a result, this modification to the method disclosed by Mimura would have been obvious to one of ordinary skill in the art at the time of the invention.

In an analogous art, Hunter discloses a method for address routing using address-sensitive mask dissemination, comprising generating a compressed address group based on the destination address of each packet identified at the second point, wherein generating the compressed address group comprises identifying network addresses based on the destination address identified at the second point; and classifying each identified network address based on a range of bits in the identified network addresses, (i.e. supporting Classless Inter-Domain Routing; abstract; column 1, line 28 to column 2, line 36; column 5, line 45-67; column 10, line 20 to column 11, line 40). One of ordinary skill in the art would have been so motivated to implement the

modification to the aforementioned method, so as to locate quickly locate the most appropriate entry (i.e. longest match search) of a given address specified in a packet thereby increasing process efficiency (Hunter column 6, lines 52- 60; column 1, lines 20-26).

Claims 11-12, and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mimura et al. (US Patent 6,847,613) in view of Vanlint (US Patent Application Publication 2001/0050903), hereinafter referred to as Mimura and Vanlint respectively.

In reference to claim 11, Mimura discloses substantial features of the claimed invention. As previously evidenced in reference to claims 1, Mimura discloses a method comprising the steps of: identifying a plurality of packets at a first point and a second point in the network; comparing a destination address of each packet identified at the first point with a destination address of one or more packets identified at the second point; and if one of the compared destination addresses matches, then identifying a source address of the corresponding packet identified at the first point, associating the identified source address and the matching destination address to a flow between the source and destination (see claim 2 rejection). However the reference fails to disclose: determining a direction of a flow of data between a source and a destination in a network; selecting a time-to-live value from the plurality of packets identified at the first point and at least one of the plurality of packets identified at the second point; and comparing the time-to-live value of the

packets identified at the first point and the at least one of the plurality of packets identified at the second point corresponding to the flow between the source and the destination to determine the direction of the flow between the source and destination. Nonetheless, these modifications would have been obvious to one of ordinary skill in the art at the time of the invention, as further evidenced by Vanlint.

In an analogous art, Vanlint discloses a method for calculating network latency that involves correlating instances of the same packet in trace files generated at a first network location and a second network location (paragraph [0019], lines 1-7). Vanlint further discloses that the aforementioned correlation comprises determining the transmission direction of the packets by comparing the time-to-live values of the common packet in multiple trace files, (paragraph [0031], line 1 to [0032], line 12; Figure 3-item 62). It would have been obvious to implement these modifications to the packet identifier method as disclosed by Mimura, because one of ordinary skill in the art would have been so motivated to determine the latency associated with an identified flow. As a result, a cause for delay can be determined through improved network performance analysis (Vanlint paragraph [0002], lines 5-18).

In reference to claim 12, Mimura discloses substantial features of the claimed invention. As previously evidenced in reference to claim 1, Mimura discloses a method comprising the steps of: identifying a plurality of packets at a first point and a second point in the network; comparing a source address of each packet identified at the second point with a source address of one or more packets identified at the

first point; if one of the compared source addresses matches, then identifying a destination address of the corresponding packet identified at the second point, and associating the identified destination address and the matching source address to a flow between the source and destination, (see claim 1 rejection). However the reference fails to disclose: determining a direction of a flow of data between a source and a destination in a network; selecting a time-to-live value from the plurality of packets identified at the first point and at least one of the plurality of packets identified at the second point; and comparing the time-to-live value of the packets identified at the first point and the at least one of the plurality of packets identified at the second point corresponding to the flow between the source and the destination to determine the direction of the flow between the source and destination. Nonetheless, these modifications would have been obvious to one of ordinary skill in the art at the time of the invention, as further evidenced by Vanlint.

In an analogous art, Vanlint discloses a method for calculating network latency that involves correlating instances of the same packet in trace files generated at a first network location and a second network location (paragraph [0019], lines 1-7). Vanlint further discloses that the aforementioned correlation comprises determining the transmission direction of the packets by comparing the time-to-live values of the common packet in multiple trace files, (paragraph [0031], line 1 to [0032], line 12; Figure 3-item 62). It would have been obvious to implement these modifications to the packet identifier method as disclosed by Mimura, because one of ordinary skill in the art would have been so motivated to determine the latency associated with an identified flow. As a

result, a cause for delay can be determined through improved network performance analysis (Vanlint paragraph [0002], lines 5-18).

In reference to claim 17, although Mimura teaches substantial features of the claimed invention the reference fails to teach expressly the second set of information comprising a second time-to-live value; the flow entry indicates the direction of information flowing between the first node and the second node, the flow entry based upon the first time-to-live value and the second time-to-live value. Nonetheless, these modifications would have been obvious to one of ordinary skill in the art at the time of the invention, as further evidenced by Vanlint.

In an analogous art, Vanlint discloses a method for calculating network latency that involves correlating instances of the same packet in trace files generated at a first network location and a second network location (paragraph [0019], lines 1-7). Vanlint further discloses that the aforementioned correlation comprises determining the transmission direction of the packets by comparing the time-to-live values of the common packet in multiple trace files, (paragraph [0031], line 1 to [0032], line 12; Figure 3-item 62). It would have been obvious to implement these modifications to the packet identifier method as disclosed by Mimura, because one of ordinary skill in the art would have been so motivated to determine the latency associated with an identified flow. As a result, a cause for delay can be determined through improved network performance analysis (Vanlint paragraph [0002], lines 5-18).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to LaShanya R Nash whose telephone number is (571) 272-3957. The examiner can normally be reached on 9am-5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenton Burgess can be reached on (571) 272-3949. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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